

What is Claimed is:

1. A mobile payment method, comprising the steps of:

(a) receiving a payment request in an operation center from a registered merchant through a communication network;

5 (b) requesting said registered merchant, through said communication network, to inform a customer ID of a customer, who is a registered member of said operation center, and a transaction amount to be paid by said customer to said registered merchant;

(c) verifying a merchant ID of said registered merchant by said operation center;

10 (d) confirming said payment request by said operation center by notifying said customer and requesting for verification;

(e) requesting said customer to verify said payment transaction by confirming said transaction amount and inputting a security password of said customer registered in said operation center; and

15 (f) confirming with said registered merchant whether said payment request is issued.

2. The mobile payment method, as recited in claim 1, before the step (a), further comprising the steps of:

20 indicating to said registered merchant by said customer that said customer prefers to settle a payment through a mobile payment system when said customer decides to purchase one or more product from said registered merchant; and

initialing transaction by sending said payment request to said operation center by said registered merchant through a communication terminal.

3. The mobile payment method, as recited in claim 1, wherein the step (b) further comprises the steps of:

(b.1) requesting said customer ID of said customer and said transaction amount by said operation center through a communication terminal; and

5 (b.2) entering said customer ID of said customer and said transaction amount to be paid by said customer to said registered merchant through said communication terminal.

4. The mobile payment method, as recited in claim 2, wherein the step (b) further comprises the steps of:

10 (b.1) requesting said customer ID of said customer and said transaction amount by said operation center through said communication terminal; and

(b.2) entering said customer ID of said customer and said transaction amount to be paid by said customer to said registered merchant through said communication terminal.

15 5. The mobile payment method, as recited in claim 4, wherein, in the step (b), further transaction information is requested by said operation center, wherein said transaction information include but not limit to product code, transaction date and time, and identification of said registered merchant.

20 6. The mobile payment method, as recited in claim 1, wherein the step (c) further comprises the steps of:

(c.1) receiving said customer ID and said transaction amount from said registered merchant by said operation center; and

(c.2) verifying identity of said registered merchant by checking a merchant database by said operation center.

25 7. The mobile payment method, as recited in claim 2, wherein the step (c) further comprises the steps of:

(c.1) receiving said customer ID and said transaction amount from said registered merchant by said operation center; and

(c.2) verifying identity of said registered merchant by checking a merchant database by said operation center.

5 8. The mobile payment method, as recited in claim 3, wherein the step (c) further comprises the steps of:

(c.1) receiving said customer ID and said transaction amount from said registered merchant by said operation center; and

10 (c.2) verifying identity of said registered merchant by checking a merchant database by said operation center.

9. The mobile payment method, as recited in claim 4, wherein the step (c) further comprises the steps of:

(c.1) receiving said customer ID and said transaction amount from said registered merchant by said operation center; and

15 (c.2) verifying identity of said registered merchant by checking a merchant database by said operation center.

20 10. The mobile payment method, as recited in claim 6, wherein said communication device is a WAP phone and the step (c) further comprises a step (c.3) of pushing a transaction request to said WAP phone of said customer using WAP 1.2 push architecture when said identity of said registered merchant and said transaction amount are valid.

25 11. The mobile payment method, as recited in claim 7, wherein said communication device is a WAP phone and the step (c) further comprises a step (c.3) of pushing a transaction request to said WAP phone of said customer using WAP 1.2 push architecture when said identity of said registered merchant and said transaction amount are valid.

12. The mobile payment method, as recited in claim 8, wherein said communication device is a WAP phone and the step (c) further comprises a step (c.3) of pushing a transaction request to said WAP phone of said customer using WAP 1.2 push architecture when said identity of said registered merchant and said transaction amount
5 are valid.

13. The mobile payment method, as recited in claim 9, wherein said communication device is a WAP phone and the step (c) further comprises a step (c.3) of pushing a transaction request to said WAP phone of said customer using WAP 1.2 push architecture when said identity of said registered merchant and said transaction amount
10 are valid.

14. The mobile payment method, as recited in one of claims 1, 2, 3, 4, 6, 7, 8, and 9, wherein the step (d) further comprises the steps of:

(d.1) sending a notification message to said communication device of said customer to indicate said payment request; and

(d.2) verifying said transaction amount and other transaction information with
15 said customer.

15. The mobile payment method, as recited in claim 14, wherein the step (e) further comprises the steps of:

(e.1) requesting said customer to confirm said transaction amount and to enter
20 said security password of said customer; and

(e.2) verifying said transaction amount and inputting said security password by said customer.

16. The mobile payment method, as recited in claim 10, 11, 12, or 13, wherein said operation center comprises a network server for receiving said payment request from
25 said registered merchant in the step (a) and a mobile server, which communicates with said network server via an Internet, for confirmation of said payment with said customer in the steps (d) and (e), in which said network server communicates with said mobile server via an Internet, wherein the step (e) further comprises the steps of:

(e.1) requesting said customer to confirm said transaction amount and to enter said security password of said customer;

(e.2) verifying said transaction amount and inputting said security password by said customer;

5 (e.3) transmitting said security password and confirmation to said mobile server over said air by using WAP1.2 secured transaction layer through said cellular network;

(e.4) forwarding said security password and confirmation to said network server via an Internet using IPSec protocol;

10 (e.5) scrutinizing said security password and confirmation by a firewall of said network server to make sure said security password and confirmation are authenticate; and

(e.6) verifying said security password of said customer by said network server of said operation center by checking said customer database thereof.

15 17. The mobile payment method, as recited in claim 16, wherein the step (f) further comprises the steps of:

(f.1) issuing a final transaction confirmation a successful verification in the step (e) to said communication terminal of said registered merchant via a dial-up telephone line; and

20 (f.2) printing a transaction receipt by said communication terminal to complete said payment transaction.

18. The mobile payment method, as recited in claim 10, 11, 12, or 13, wherein said security password is a phone number of said WAP phone of said customer.

19. The mobile payment method, as recited in claim 16, wherein said security password is a phone number of said WAP phone of said customer.

20. The mobile payment method, as recited in claim 10, 11, 12, or 13, wherein said communication network is a WAP secured transaction layer cellular network.

21. The mobile payment method, as recited in claim 16, wherein said communication network is a WAP secured transaction layer cellular network.

5 22. A mobile payment system, comprising:

at least a communication terminal installed by a merchant registered in an operation center as registered merchant;

10 a communication network for connecting said communication terminal of said registered merchant with an operation center, wherein said registered merchant is capable of submitting a payment request to said operation center by said registered merchant at said communication terminal via said communication network, wherein after said operation center receives said payment request, said operation center is capable of requesting said registered merchant, through said communication network, to inform a customer ID of a customer, who is a registered member of said operation center, and a
15 transaction amount to be paid by said customer to said registered merchant; and

20 a communication device, which is carried by said customer, connecting with said operation center for receiving confirmation message from said operation center to verify a payment amount requested by said registered merchant for at least a product purchased by said customer from said registered merchant, by entering a security password of said customer in said communication device for transmitting to said operation center.

23. The mobile payment system, as recited in claim 22, wherein said operation center comprises a network server for receiving said payment request from said registered merchant and a mobile server, which communicates with said network server via an
25 Internet, for confirmation of said payment with said customer.

24. The mobile payment system, as recited in claim 22, wherein said communication device is a WAP phone communicating with said operation center via a cellular network.

25. The mobile payment system, as recited in claim 23, wherein said communication device is a WAP phone communicating with said mobile server via a cellular network.

26. The mobile payment system, as recited in claim 22, wherein said communication terminal is connected with said operation center through a dial-up telephone line.

27. The mobile payment system, as recited in claim 23, wherein said communication terminal is connected with said network server through a dial-up telephone line.

28. The mobile payment system, as recited in claim 24, wherein said communication terminal is connected with said operation center through a dial-up telephone line.

29. The mobile payment system, as recited in claim 25, wherein said communication terminal is connected with said network server through a dial-up telephone line.